

CLAIMS

1. A disc loading device comprising:
  - a tray in which a disc is placed;
  - a main chassis into which the tray is loaded and from which the tray is unloaded;
  - a guide groove disposed parallel to a loading/unloading direction in the tray or the main chassis; and
  - guides that are disposed at the main chassis or the tray and engage with the guide groove,
    - wherein the width of the guide groove in the vicinity of a loading start position or an unloading end position of the tray is formed narrower than the width at another portion.
2. The disc loading device of claim 1, wherein a gap between a side wall of the guide groove, at the portion where the width of the guide groove is narrowly formed, and the guides that engage with the side wall is 0.1 mm to 0.2 mm.
3. The disc loading device of claim 1 or 2, wherein at the time of the start of loading or at the time of the end of unloading of the tray, there are at least two guides that engage with the side wall of the portion where the width of the guide groove is narrowly formed.
4. A disc loading device comprising:
  - a tray in which a disc is placed;
  - a main chassis into which the tray is loaded and from

which the tray is unloaded;

a guide groove disposed parallel to a loading/unloading direction in the tray or the main chassis;

guides that are disposed at the main chassis or the tray and engage with the guide groove; and

an elastic body that presses a side wall of the guide groove and the guides into contact at the time of loading/unloading of the tray.

5. The disc loading device of claim 4, wherein at the time of loading/unloading of the tray, a displacement amount of the elastic body in the vicinity of a loading start position or an unloading end position of the tray is larger than a displacement amount at another portion.

6. The disc loading device of claim 4 or 5, wherein the guides are plurally disposed in the vicinity of the loading start position or the unloading end position of the tray, and the elastic body is disposed between adjacent guides.

7. The disc loading device of claim 4 or 5, wherein the elastic body is plurally disposed in the vicinity of the loading start position or the unloading end position of the tray, and the guides are disposed between adjacent elastic bodies.

8. A disc loading device comprising:

a tray in which a disc is placed;

a main chassis into which the tray is loaded and from which the tray is unloaded;

a guide wall disposed parallel to a loading/unloading direction in the main chassis or the tray;

a lateral pressure wall disposed parallel to the guide wall in the tray or the main chassis; and

an elastic body that presses the guide wall and the lateral pressure wall into contact at the time of loading/unloading of the tray.

9. The disc loading device of claim 8, wherein at least two elastic bodies are disposed in the vicinity of a loading start position or an unloading end position of the tray.

10. The disc loading device of any of claims 4 to 9, wherein the elastic body is disposed integrally with the main chassis or the tray.